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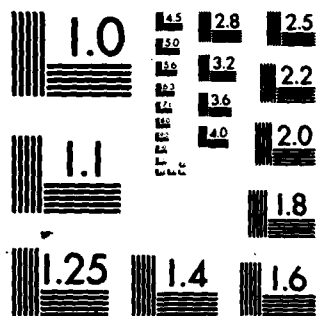
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ROYAL AIRCRAFT ESTABLISHMENT

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(6) CATALOGUE OF THE PUBLICATIONS ISSUED BY THE GAS DYNAMICS DEPARTMENT,
THE SUPERSONICS DIVISION OF AERODYNAMICS DEPARTMENT AND BY THE
VIBRATION DEPARTMENT BETWEEN 1944 AND 1950

Compiled by

(10) S. A. Thornton

SUMMARY

(12) 24

This catalogue lists various series of publications issued by three RAE Departments covering research into gas turbines, ramjets, supersonic flight and the fluid dynamics associated with them. An author index is included.

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Vibration Department issued a report and a technical note series between 1944 and 1949 when the staff were absorbed into other Departments and other Establishments.

The series abbreviations used on the publications themselves are GAS (Gasdynamics) VIB (Vibrations) and SD, SUP, Aero/Sup or Aero (Sup) (Supersonics Division).

AERO - RAE Aerodynamics Department Reports

AERO TN - RAE Aerodynamics Department Technical Notes

CHEM TN - RAE Chemistry Department Technical Notes

EA - RAE Enemy Aircraft Reports

GW TN - RAE Guided Weapons Department Technical Notes

SME R/TN - RAE Structures and Mechanical Engineering Department Reports/
Technical Notes

ARC R - Aeronautical Research Council, Report Series (unpublished)

ARC R&M - Aeronautical Research Council, Reports and Memoranda

ARC CP - Aeronautical Research Council, Current Papers

Mono. - Ministry of Aircraft Production or Ministry of Supply Monographs
(Scientific War Records).

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GASDYNAMICS

Reports GAS/-

Report No.	Author	Title	Date
1 (ARC R 9547)	Nicholson, L.F. Johnson, J.E.	Heat exchangers for gas turbines.	1946.02
2 (ARC R 9928)	Kell, C. Sunley, H.L.G.	The Walter 109-509 A ₂ bi-fuel aircraft rocket motor.	1946.03
3	- - - - - NOT ISSUED - - - - -		
4 (ARC R 9915) (EA 271/1)	Richards, I.W.	Examination of Junkers Jumo 222 24 cylinder radial engine.	1946.03
5 (ARC R 9890)	Jackson, R.G.	Cooling calibration of standard Hercules 100 power plant (as fitted to Halifax VI aircraft) on test bed.	1946.04
6 (EA 245/2)	Sharp, N.	Examination of an experimental Riedel engine for a turbine engine starter unit.	1946.05
7 (ARC R 10004)	Reid, J.	The gas dynamic theory of the athodyd.	1946.05
7 Addendum (ARC R 11287) (ARC R&M 2370)	Herbert, P.J.	Gas dynamic theory of the athodyd: extending the range of the investigation.	1946.10
8 (ARC R 10110) ARC R&M 2501)	Lukasiewicz, J.	Supersonic diffusers.	1946.06
9 (ARC R 9970)	Earl, A.G. Reid, J.	Performance calibration of a Crecy V twin cylinder direct petrol injection, sleeve valve, two-stroke engine.	1946.06
10 (ARC R 9993)	Nonweiler, T.	A linearised solution of the motion of a compressible fluid through tubes with axial symmetry.	1946.07

SUPERSONICS DIVISION

REPORT SD/- REPORT AERO/SUP/-

Report No.	Author	Title	Date
11 (ARC R 10251)	Nicholson, L.F. Nonweiler, T. Morley, A.W.	The application of atomic energy to aircraft propulsion.	1946.11
12 (ARC R 10072)	Bateman, P.	Cabin cooling in high speed flight.	1946.08
13 (ARC R 10139)	Wilson, J.L.	Liquid oxygen supply for aircraft rocket motors.	1946.08
14	- - - - - NOT ISSUED - - - - -		
15 (AERO 2196) (ARC R 10913)	Dando, R.C.A. Nicholson, L.F.	The RAE low drag power plant: development and bench tests.	1947.05
16 (AERO 2180) (ARC R 10626)	Staff	Flight test at transonic speeds on freely falling models: Part I. Models with 2-channel telemetering	1947.01
17 (AERO 2188) (ARC R 10697)	Broughton, L.W. Newton, R.J. Dick, A.	Development of combustion chamber for the Alpha rocket motor.	1947.03
18 (AERO 2204) (ARC R 10810)	Eggink, H.	Fluctuation of flow in high speed wind tunnels.	1947.06
19 (AERO 2209) (ARC R 10915)	Dunning, J.E.P. Marlow, B.	The testing of gas turbine engine combustion chambers under simulated altitude conditions.	1947.06
20 (AERO 2211) (ARC R 10977) (ARC R&M 2563)	Lukasiewicz, J.	Humidity effects in supersonic flow of air.	1947.07
21 (AERO 2214) (ARC R 10984)	David, F.W.	Analysis of a test run of the Alpha rocket motor.	1947.07
22 (AERO 2215)	Barker, A.	Development of Alpha rocket motor propellant system for Vickers transonic model aircraft.	1947.07
23 (AERO 2221) (ARC R 11039)	Royle, J.K. Bowling, A.G. Lukasiewicz, J.	Calibration of two dimensional and conical supersonic multi-nozzles.	1947.09

Report No.	Author	Title	Date
24 (AERO 2227) (ARC R 11460)	Beeton, A.B.P.	High temperature rocket performance calculations.	1947.10
25 (AERO 2239) (ARC R 11364)	Staff	Flight tests on transonic speeds on freely falling models: Part 2. Tests on two further models.	1947.12
26 (AERO 2257) (ARC R 11597)	Anderson, J.R. Herbert, P.J. Eggink, H.	Wind tunnel tests at Mach number 1.4 of rocket-propelled transonic pilotless aircraft.	1948.04
27 (AERO 2266) (ARC R 11770) (ARC R&M 2630)	Johnson, J.E.	Regenerator heat exchangers for gas turbines.	1948.05
28 (AERO 2278) (MONO 2.4.09) (ARC R 12151)	Morley, A.W.	Performance of a piston type aero engine.	1946.03
29 (AERO 2279) (MONO 2.4.04)	Simpson, E.	Aircraft engine starting.	1948.08
30 (AERO 2282) (ARC R 12008)	Reid, J.	Development of six inch diameter ramjet combustion chamber.	1948.09
31 (AERO 2292) (ARC R 12130) (ARC R&M 2613)	Lukasiewicz, J. Royle, J.K.	Boundary layer and wake investigation in supersonic flow.	1948.10
32 (AERO 2301)	Royle, J.K. Palmer, J.R.	Cooling calibration of Hercules 100 power plant:- flight tests and correlation with bench tests.	1948.11
33 (AERO 2310) (ARC R 12383)	Gorges, H. Dunning, J.E.P.	Ramjet performance - a survey.	1949.03
34 (AERO 2326) (ARC R 12527) (ARC R&M 2703)	Eggink, H.	The improvement in pressure recovery in supersonic wind tunnels.	1949.05
35 (AERO 2345) (ARC R 13058)	Staff	Flight tests at transonic speeds on freely falling models; Part III. Tests on rectangular wings of RAE 101 section.	1949.11

NB A later version of SD35 issued as AERO 2345 (Revised), ARC R 13584

GASDYNAMICS
TECHNICAL NOTES GAS/-

Report No.	Author	Title	Date
1	Sharp, N.	Tropical endurance tests of a modified 270 cc. Enfield ground generating set reference 42Y/650.	1946.01
2 (ARC R 9471) (AERO TN 1757)	Beeton, A.B.P. Whitby, R.H.	Comparison of rocket and turbine power plants to meet a high interceptor climb requirement.	1946.02
3	Rayne, J.M.	Winterisation tests of the Hercules VI (Hercules 100) power plant.	1946.02
4 (ARC R 9659)	Beeton, A.B.P.	The future development proposed for Walter rocket engines for aircraft propulsion.	1946.01
5 (ARC R 9443)	Willcock, R.M.	Recalculation of Napier combined piston engine and turbine power plant performance.	1946.02
6 (ARC R 9710)	Baxter, A.D.	Hydrogen peroxide starting for turbine engines.	1946.02
7 (ARC R 9566)	Beeton, A.B.P.	The optimum power input to an engine-driven cooling fan.	1946.02
8 (ARC R 9643)	Willcock, R.M.	Power plants for interceptor fighters.	1946.04
9	Tournet, R.	Development tests on oil seals for cabin superchargers.	1946.02
10	Kell, C.	Method of operating and testing the Walter 109-509A bi-fuel liquid rocket motor.	1946.03
11 (AERO TN 1670) (ARC R 9912)	Baxter, A.D. Kell, C.	Walter rocket motor testing technique and equipment.	1946.03
12 (ARC R 9706)	Beeton, A.B.P.	Information on Walter rocket propulsion units developed from 1936 to 1945.	1946.03
13	- - - - - NOT ISSUED - - - - -		
14	Sharp, N.	Prolonged tropical endurance and cold starting tests of a 5.6 K.V.A. Enfield 'Cub' diesel-electric set, Mk III.	1946.04

Report No.	Author	Title	Date
15 (ARC R 9601)	Simpson, E.	Note on possible future designs of experimental transonic models.	1946.04
16	Shaw, J.M.	The outline design and estimated performance of a proposed cabin pressurising and air conditioning plant for the Brabazon 1 Mk II aircraft.	1946.04
16 Addendum	Shaw, J.M.	Addendum to Technical Note GAS 16.	1946.05
17 (ARC R 9860)	Beeton, A.B.P.	Some calculations on the performance of a subsonic propulsive duct.	1946.04
18	Linton, G.	Cold air flow tests on a single air-cooled jacketed engine cylinder.	1946.04
19	Pugh, B.	Flame temperature measurement in propulsive ducts and rockets.	1946.04
20 (ARC R 9714)	West, F.L.	A brief review of the problem of exhaust silencing.	1946.05
21	Bortkiewicz, J.F. Henderson, F.D.	Flight trials of a single lever carburettor for Cheetah engines.	1946.05
22	Dick, A.	Oil coolers: performance characteristics of Serck II pass radial flow oil coolers Serial nos. S.R.38738 and S.R.39972.	1946.05
23	Eyers, J.A. Roberts, D.N.	Rig tests on a system to ensure even emptying of aircraft fuel tanks.	1946.05
24 (ARC R 10170)	Willcock, R.M.	Effect of solid particles in the exhaust of a propulsive duct.	1946.05
25 (ARC R 10002) (EA 241/3)	Drouet, T.	The Jumo 213 automatic power control system.	1946.06
26 (ARC R 9697)	Staff	The use of rocket-propelled flying models for experiments at transonic speeds.	1946.06
27	Anderson, J.R.	Liquid oxygen: a review of information on production, handling and use in rocket motors.	1946.06

Report No.	Author	Title	Date
28	Earl, A.G. Long, C.	An investigation of the heating effect of a jet engine on a concrete surface behind the tail pipe.	1946.06
29	Dick, A.	Performance characteristics of Serck, II pass radial flow oil coolers fitted with sealed baffles. Serial nos. S.R.38730 and S.R.3999.	1946.06
30	----- NOT ISSUED -----		
31 (ARC R 10001) (ARC R&M 2389)	Beeton, A.B.P.	An approximate method for estimating the performance of oxygen-oil rockets.	1946.06
32	Hilpert, R. Schmidt, R.	Physical properties of lubricating oil DED 2472/B/O.	1946.07
33	Barber, R.H.P.	Investigation of high cylinder temperatures on Lycoming O-290 engine in Auster V aircraft.	1946.07
34	Staff	Artificial altitude tests on a Marshall type 15, cabin supercharger.	1946.07
35	Nonweiler, T.	A rapid method of computing the trajectories of bombs achieving sonic speeds.	1946.07
36 (ARC R 10078)	Nonweiler, T.	A note on supersonic flight.	1946.08
<u>SUPERSONICS DIVISION</u>			
TECHNICAL NOTES SD/-, AERO/SUP/-			
37 (ARC R 10059)	Lukasiewicz, J.	Estimated range and size of supersonic wind tunnels operated by the combined R.A.E. and L.F.A. (Volkenrode) high altitude plants.	1946.08
38	Dick, A.	Oil characteristics of Morris secondary surface combined oil cooler and radiator, no.D.476.	1946.08
39 (AERO TN 1828) (ARC R 10032)	Smith, F.	Programme of aerodynamic tests on free flight models (Vickers rocket propelled models and dropped bodies).	1946.08

Report No.	Author	Title	Date
40 (AERO TN 1835) (ARC R&M 2542) (ARC R 10171)	Beeton, A.B.P.	Tabulated thermal data for hydro-carbon oxidization products at high temperatures.	1946.10
41 (AERO TN 1839) (ARC R 10279)	West, F.L.	Preliminary design of a 600 lb. thrust liquid oxygen-paraffin rocket motor.	1946.10
42 (AERO TN 1838) (R&M 2542) (ARC R 10297)	Beeton, A.B.P.	The effect of dissociation on rocket performance calculations.	1946.10
43 (AERO TN 1842)	Beeton, A.B.P.	The increase of rocket thrust with altitude.	1946.10
44 (AERO TN 1846) (ARC R 10298)	Ring, I.H. David, F.W.	Review of available data on the heat capacity of some common gases.	1946.10
45 (AERO TN 1850) (ARC R 10102)	Shaw, J.M.	Description of three tracks designed to carry projectiles at high speed.	1946.11
46 (AERO TN 1855) (ARC R 10103)	Wilson, J.L.	An interim statement concerning the design of a high speed railway for transonic research.	1946.11
47	NOT ISSUED	Information in this note embodied in Report AERO 2179.	
48 (AERO TN 1852) (ARC R 10370)	Nonweiler, T.	Aerodynamic forces in transonic flight.	1946.11
49 (AERO TN 1834) (ARC R 10578)	Nonweiler, T.	Rate of heat transfer due to aerodynamic heating at high altitudes.	1946.12
50 (AERO TN 1861)	Beeton, A.B.P.	Effect of fuel mixture ratio and combustion chamber pressure on rocket performance.	1947.01
51 (AERO TN 1863)	Marlow, B. Dunning, J.E.	Ignition tests on Goblin turbine engine combustion chamber under simulated altitude windmilling conditions.	1947.01
52 (AERO TN 1866)	Beeton, A.B.P.	Calculated performance of hydrogen-oxygen mixtures as rocket propellants.	1947.01

Report No.	Author	Title	Date
53 (AERO TN 1871)	Beeton, A.B.P.	Calculated performance of carbon-oxygen mixtures as rocket propellants.	1947.02
54 (AERO TN 1872)	Dunning, J.E.P.	A suggested method of measuring high temperatures in high velocity gas streams at low pressure conditions.	1947.02
55 (AERO TN 1874) (ARC R 10577)	Staff	Note on future rocket-propelled supersonic models.	1947.03
56 (AERO TN 1880) (ARC R 10505)	Smelt, R.	Note on fighter-bomber speed difference in the transonic speed range.	1947.03
57 (AERO TN 1886) (ARC R 10749)	West, F.L.	Some tests on the cracking possibility of a hydrocarbon fuel used as a rocket nozzle coolant.	1947.04
58 (AERO TN 1884) (ARC R 10576)		Programme of supersonic wind tunnel tests to be made by Supersonic Division, R.A.E.	1947.04
59 (AERO TN 1891) (ARC R 10750)	West, F.L.	An approximate method for predicting the heat transfer in a cooled rocket nozzle.	1947.05
60 (AERO TN 1897)	Winter, M.	Thermodynamic charts for the calculation of gas-turbine performance.	1947.06
61 (AERO TN 1901) (ARC R 10811)	Beeton, A.B.P.	A preliminary consideration of the rocket-propelled supersonic aircraft.	1947.06
62 (AERO TN 1904) (ARC R 10916)	Beeton, A.B.P.	Possibilities of gas turbine jet propulsion engines for supersonic aircraft.	1947.07
63 (AERO TN 1909) (ARC R 10917)	Winter, M.	Ground-launched models for transonic research.	1947.07
64 (AERO TN 1912)	Beeton, A.B.P.	A total heat-entropy diagram for H_2O_2 decomposition products.	1947.08
65 (AERO TN 1914) (ARC R 11211)	Palmer, J.R. Dando, R.C.A.	The R.A.E. low drag power plant - results of flight tests.	1947.08

Report No.	Author	Title	Date
66 (AERO TN 1934) (ARC R 12009)	Warren, C.H.E. Gunn, R.E.W.	Estimation of external drag of an axially symmetric conical nose entry for jet engine at supersonic speeds.	1948.01
67 (AERO TN 1924) (ARC R 11212)	Broughton, L.W. Bekassy, J. McMullen, B.W.	Note on suggested variable pressure firing range.	1947.11
68 (AERO TN 1927) (ARC R 11408)	Long, C. Earl, A.G.	Development of a ram-jet burner system using vaporised petrol.	1947.12
69 (AERO TN 1928) (ARC R 11288)	Winter, M. Multhopp, H.	Transonic research aircraft with 'Avon' turbine jet engine (A.J.65).	1948.02
70 (AERO TN 1929) (ARC R 11457)	Beeton, A.B.P.	Note on the maximum possible air consumption of a jet engine.	1947.01
71 (AERO TN 1933) (CHEM TN 1035) (ARC R 11535)	Dick, A. Murray, R.C.	Tests on soluble chokes suitable for regulating hydrogen peroxide flow to a rocket motor.	1948.03
72 (AERO TN 1935) (ARC R 11461)	Dunning, J.E.P. Papworth, R.W.O.	Temperature measurements in gas turbine engines at high altitudes.	1948.01
73 (AERO TN 1940) (ARC R 11289)	Nonweiler, T. McMullen, B.W.	Methods of comparison of engine performance.	1948.02
74 (AERO TN 1941) (GW TN 12) (ARC R 11290)	Warren, C.H.E. Curtis, M.C.	An indication of the weights and ranges of future jet-propelled vehicles.	1948.02
75 (AERO TN 1943) (ARC R 11534) (ARC R&M 2816)	Beeton, A.B.P.	The calculated performance of ethyl alcohol-water mixtures as rocket fuels with liquid oxygen.	1948.03
76 (AERO TN 1954) (ARC R 11569)	Beeton, A.B.P.	Characteristics for choking jet engine nozzles, including reheat and water injection.	1948.04
77 (AERO TN 1953) (ARC R 11737)	Nonweiler, T.	A summary of experimental data on wing characteristics at transonic speeds.	1948.04

Report No.	Author	Title	Date
78 (AERO TN 1957) (ARC R 11486)		Progress of ram-jet activities in the R.A.E.	1948.05
79 (AERO TN 1960) (ARC R 11580)	Owen, P.R. Nonweiler, T.R.F. Warren, C.H.E.	Preliminary note on the design and performance of a possible supersonic fighter aircraft.	1948.06
80 (AERO TN 1962)	Margrie, F.S.	Note on bursting discs used on R.A.E. test plant.	1948.07
81 (AERO TN 1966) (ARC R 11839)	Earl, A. G.	Development of ram-jet petrol burner with anvil jet fuel spray.	1948.08
82 (AERO TN 1971) (ARC R 11838)	Beeton, A.B.P.	Relative merits of simple fuel metering systems for ramjets.	1948.09
83 (AERO TN 1972)	Bateman, P.J.	Tests with an air turbine and heat exchanger considered as an air drying plant.	1948.08
84 (AERO TN 1973) (ARC R 11975)	Lukasiewicz, J.	Diffusers for small supersonic Mach numbers: design data.	1948.09
85 (AERO TN 1968) (ARC R 12023) (ARC R&M 2669)	Lukasiewicz, J.	Conical flow as result of shock and boundary layer interaction on a probe.	[1948.10]
86 (AERO TN 1978)	Bowling, A.G.	Use of sweat cooling to prevent build-up of oxide in a combustion chamber.	1948.11
87 (AERO TN 1979)	Earl, A.G.	Ramjet test plant using Derwent engines as compressors.	1948.11
88 (AERO TN 1981) (ARC R 12192)	Beeton, A.B.P.	Calculations on effect of high forward speeds on performance of jet propulsion engines.	1948.12
89 (AERO TN 1982) (ARC R 12374) (ARC R&M 2563)	Royle, J.K.	Control of condensation in supersonic tunnels by pre-expansion.	1948.12
90 (AERO TN 1983) (ARC R 12242)	Marlow, B. Dunning, J.E.P.	Limiting ignition characteristics of gas turbine engines.	1949.01

Report No.	Author	Title	Date
91 (AERO TN 1994) (ARC R 12483) (ARC CP 59)	Johnson, J.E. Monaghan, R.J.	Measurement of heat transfer and skin friction at supersonic speeds: preliminary results of measurements on flat plate at Mach number of 2.5.	1949.04
92 (AERO TN 2000) (ARC R 12582)	Fraenkel, L.E. Goldsmith, E.L.	A preliminary investigation of the performance of conical supersonic diffusers.	1949.06
93 (AERO TN 2003) (ARC R 12631)	Beeton, A.B.P.	Calculated values of air specific impulse and related quantities for a typical hydrocarbon fuel.	1949.06
94 (AERO TN 2009) (ARC R 12717)	Beeton, A.B.P.	The theoretical performance of various hydrocarbon fuels for ramjets.	1949.08
95 (AERO TN 2016) (ARC R 12718)	Fuller, L. Dunning, J.E.P.	Altitude tests on a gas turbine engine combustion chamber using upstream fuel injection (Metropolitan Vickers E26).	1949.08
96 (AERO TN 2025) (ARC R 12963) (ARC R&M 2760)	Monaghan, R.J.	An approximate solution of the compressible laminar boundary layer on a flat plate.	1949.11
97 (AERO TN 2028) (ARC R 12943)	Beeton, A.B.P.	Some curves for use in ram-jet performance calculations.	1949.11
98 (AERO TN 2027) (ARC R 12964)	Lawrence, T.	Drag measurements of a model aeroplane using the ground-launched, rocket-boosted model technique (Fairey Project 4).	1949.11
99 (AERO TN 2031) (ARC R 13064) (ARC CP 64)	Monaghan, R.J. Johnson, J.E.	The measurement of heat transfer and skin friction at supersonic speeds: Part II. Boundary layer measurements on a flat plate at $M = 2.5$ and zero heat transfer.	1949.12
100 (AERO TN 2033) (ARC R 13425) (ARC R&M 2745)	Lukasiewicz, J.	Design and calibration tests of a 5.5 inch square supersonic tunnel.	1950.02

AERO SUPERSONICS DIVISION
TECHNICAL MEMORANDA AERO/SD/

SD No.	Author	Title	Date
1	Smelt, R.	Transonic research by flying models launched from the ground.	1947.02
2	Beeton, A.B.P.	General description of proposed free flight supersonic models for aerodynamic experiments.	1948.02
3	McMullen, B.W.	Variable pressure range: notes on design consideration, I. Theoretical trajectories.	1948.03
4	Warren, C.H.E.	The effect of frequency drift on the accuracy of measurements made in freely falling model tests.	1948.12
5	Bateman, P.J.	Interim note on tests of experimental activated alumina air dryer.	1948.12
6	Warren, C.H.E.	An analysis of the accuracy possible in the derivation of drag from distance - time data.	1948.12
7	Warren, C.H.E.	The accuracy with which aileron effectiveness can be measured on a decelerating missile.	1948.12
8	Perring, W.G.A. Pattison, R.R.	Note on the means of providing power requirements for future aerodynamical research, Part I. Possible use of water power.	1949.02
9	Kell, C.	Flight tests at transonic speeds on rectangular wings of RAE 101 section by the freely falling model technique.	1949.04
10	Kell, C.	Position error measurements on two Mosquito aircraft used in freely falling model experiments.	1949.04
11	Lawrence, T.F.C.	Programme of tests for wing drag measurements using ground-launched rocket boosted models.	1949.04
12	Anderson, J.R.	Note on sting design for the 9 in. supersonic tunnel balance.	1949.04
13	Bateman, P.J.	Second interim note on tests of experimental activated alumina air dryer.	1949.05

SD No.	Author	Title	Date
14	Rathwell, B.L.	Pressure loss tests of finned tubes for main air cooler of 8 ft. x 8 ft. supersonic wind tunnel.	1949.06
15	Warren, C.H.E.	Proposals on the definition of the internal drag of a ducted body.	1949.06
16	Warren, C.H.E.	An analysis of the accuracy possible in the derivation of deceleration from time : velocity data, with special reference to the data obtained from a doppler record by a Reed discriminator.	1949.09
17	Herbert, P.J.	A preliminary analysis of wind tunnel tests to determine the lift curve slope and the position of the centre of pressure on bodies of revolution at supersonic speeds.	1949.09
18	Lawrence, T.F.C.	Interim note on control effectiveness tests using ground-launched rocket-boosted models.	1949.09
19	Lawrence, T.F.C.	Interim note on drag measurements using ground-launched rocket-boosted models.	1949.09
20	Lawrence, T.F.C.	Notes on transonic research aerodynamics in Canada.	1949.10
21	Beeton, A.B.P.	The effect of jet-pipe pressure ratio on reheat specific consumption.	1949.11
22	Pattison, R.R.	Assessment of the relative costs of various types of power supply for large wind tunnels.	1949.11
23	Bateman, P.J.	Interim note on tests of experimental air drying bed using silica gel.	1949.11
24	Lawrence, T.F.C.	Note on the derivation of drag from reflection doppler records.	1949.12
25	Pattison, R.R.	Description of water power supply for Modane-Avrieux wind tunnel installation in France.	1950.01

VIBRATION DEPARTMENT

REPORTS VIB/-

Report No.	Author	Title	Date
1	Heald, R.H.	Description of an improved cathode ray oscillograph recording channel for mechanical vibration experiments.	1944.08
2 (ARC R 8684)	Lowes, W. Evans, W.J.	Torsional vibration characteristics of an engine fitted with a mechanically and exhaust turbine driven supercharger.	1945.02
3 (ARC R 8754)	Wolfe, M.O.W. Luck, G.A.	Performance of Salomon vibration eliminators in the Hercules VI engine.	1945.02
4 (ARC R 8772) (ARC R&M 2226)	Shannon, J.F.	Vibrational problems in gas turbines, centrifugal and axial flow compressors.	1945.03
5 (ARC R 8890)	Morris, J.	An escalator process for the solution of linear simultaneous equations.	1945.07
6 (ARC R 8966)	Lowes, W. Evans, W.J.	Flexural vibration characteristics of the Rotol wooden propeller coupled with the torsional vibrations of the Rolls Royce 12 cylinder 90° Vee 2 stroke P.I. engine.	1945.07
7 (ARC R&M 2289) (ARC R 9084)	Morris, J. Jones, W.A. Walton, G.F.	Axial or longitudinal vibration of an aircraft.	1945.08
8 (ARC R&M 2290) (ARC R 9083)	Morris, J. Morrison, D.	The rolling vibrations of an aircraft.	1945.08
9 (ARC R&M 2291) (ARC R 9087)	Morris, J. Green, G.S.	The pitching vibrations of an aircraft.	1945.08
10 (ARC R 9244)	Mallock, R.R.M.	Determination of latent roots by means of the Mallock calculating machine.	1945.10
11 (S.M.E. R 3373)	Evans, W.J.	High speed - high duty reduction gears: present state or knowledge of design and future researches.	1946.04
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3 (EA 237/1)	Wolfe, M.O.W. Luck, G.A.	Pressure measurements on the F.Z.G.76 flying bomb motor.	1944.09
4	Heald, R.H.	An appraisal of the S.T. and C. voice frequency spectrometer.	1944.11
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6	Giles, E.	Calculation of the whirling speed of the propeller-rotor shaft fitted to the High Speed Tunnel 200 h.p. motor.	1945.01
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14 (ARC R 9276)	Green, G.S.	The effect of flexible ground supports on the pitching vibrations of an aircraft.	1945.11
15	Evans, W.J.	Present state of knowledge of design of high speed gears.	1945.11
16 (ARC R 9392) (ARC R&M 2391)	Luck, G.A. Lowe, W.	The determination of the fixed root frequencies of propeller blades using scale models and the results compared with calculations.	1945.11
17 (SME TN 346) (ARC R 9512)	Piper, M.	Natural frequencies of a Hamilton three paddle bladed propeller coupled with a Merlin 85 engine blade no. H.S.6519-OA.	1945.12

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